

Notice of Allowability

Application No.

09/787,944

Examiner

Ana M. Fortuna

Applicant(s)

SLEGERS, JOHN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 8/8/07.
2. ☒ The allowed claim(s) is/are 46-50, and 12-13, renumbered as claims 1-7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>10/12/07</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment. |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input checked="" type="checkbox"/> Other <u>See Continuation Sheet</u> . |

Continuation of Attachment(s) 9. Other: figure drawings filed on 1/17/03 are approved by the Examiner.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John M. Beltz on 9/12/07.

The application has been amended as follows:

Cancel claims 2-3, 5, 5-9, 11, 15-18, 20-21, 38, and 40-45.

Rewrite claim 39 as claim 46, and add new claims 47-50.

46. (New) A filtration system comprising:

a plurality of filters, each filter having an unfiltered fluid inlet, and unfiltered fluid outlet, a filtered fluid outlet, and a filtration medium defining a filter flowpath between the unfiltered fluid inlet and the unfiltered fluid outlet for tangential filtration by the filtration medium of fluid passing through the filter flowpath, wherein the plurality of filters includes a first group of at least one but not all of the plurality of filters and a second group including the filters not in the first group;

a first manifold connected to the unfiltered fluid inlet of each of the plurality of filters;

a second manifold connected to the unfiltered fluid outlet of each of the plurality of filters;

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a first continuous flowpath comprising :

the filter flowpath of the plurality of filters, the first and second manifolds,

a first pump, and

a fluid circuit couple between the first pump and the first manifold and further couple between the second manifold and the first pump, wherein the first pump is arranged with the fluid circuit to circulate fluid around the first continuous flowpath in parallel through the filters flowpath of the plurality of filters, a portion of the fluid passing from the unfiltered fluid inlet along one side of the filter medium to the unfiltered fluid outlet of each of the filters and a portion of the fluid passing from the unfiltered fluid inlet through the unfiltered fluid outlet of each of the filters and a portion of the fluid passing from the unfiltered fluid inlet through the filter medium of each filter and leaving each filter via the filtered fluid outlet;

a second continuous flow path comprising:

the fluid flowpath of at least one but not all of the filter in the plurality of filters;

a second pump, and

a fluid circuit couple between the second pump, and the unfiltered fluid inlet of each filter of the first filter group and further couple between the unfiltered fluid outlet of each filter of the first filter group and the second pump, to the fluid path of the at least one but not all of the filters in the plurality of filters, and further couple between the unfiltered fluid outlet and the second pump, wherein the second pump is arranged with the fluid circuit to circulate fluid around the second continuous flowpath through each filter flow path of the first filter group, a portion of the fluid passing from the unfiltered

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fluid inlet along one side of the filter medium to the unfiltered fluid outlet of each filter of the first filter group, and a portion of the fluid passing from the unfiltered fluid inlet through the filter medium of each filter of the first filter group, and leaving each filter via the filtered fluid outlet;

wherein the second continuous flowpath has a lower volume than the first continuous flow path; and

a valve arrangement couple to the first and second continuous flowpaths and selectively operable in its first state to circulate fluid around the first continuous flowpath and in a second state to circulate fluid around the second continuous flowpath and including a bypass to pass fluid from the first and second manifolds and the second filter group into the second continuous flow path in response to fluid flow around the second continuous flow path.

In claims 12 and 13, line 1, delete "39", and insert - -46- -.

47. (New) The filtration system of claim 39, wherein the plurality of filters is arranged in parallel between the first and second manifolds.

48. (New) The filtration system of claim 39, wherein the second flow path includes only one filter.

49. (new) The filtration system of claim 39 wherein the valve arrangement includes a first valve operatively associated with the unfiltered fluid inlet in the first flow path.

50. (New) The filtration system of claim 39 wherein in the second state the first pump is couple to the second continuous flowpath to drain unfiltered fluid from the first pump to the second continuous flow path.

2. The following is an examiner's statement of reasons for allowance: the system arranged with the feed manifold and fluid circuit for directing the fluid through a first group of filters and in a second arrangement combining a second pump to direct fluid to a second set of filters and further drain fluid from the first set of filters and recycle back to the second circuit, as illustrate in the figures and claim 39, is not suggested in the prior art of record. The prior art of record does teach filtering through a set of filters and recycling back to the feed pump or to a concentrate pump (Hartman); providing the valving system in combination with the second pump and bypass to drain the system is not suggested.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana M. Fortuna whose telephone number is (571) 272-1141. The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on (571) 272-1376. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ana Fortuna/
Primary Examiner, a. U. 1797

AF
October 12, 2007